



DC700

WOOD BURNING CASSETTE

INSTALLATION AND USER MANUAL





GDC GROUP Ltd - Millbrook House Grange Drive Hedge End
Southampton Hampshire SO30 2DF - England



EN 13229:2001, A1:2003,
A2:2004, AC:2006, A2/AC:2006

VKF AEA
Art. 15a B-VG
Regensburger - Münchener BStV
BlmSchV

DC700 Wood Burning Cassette

Nominal Heat Output:	8 kW
CO Emission (at 13% O ₂)	0.11%
Efficiency:	83.7%
Flue Gas Temperature:	240 °C
Safe Clearance distance to combustibles (back):	100 mm
Safe Clearance distance to combustibles (side):	100 mm

Intermittent operating unit

Wood burning use only

Do not install on a shared flue

Read and follow the user instructions

COD: 8901005900

INTRODUCTION	5
1. WARNINGS AND WARRANTY CONDITIONS	6
1.1. SAFETY WARNINGS	6
1.2. OPERATING WARNINGS	6
1.3. WARRANTY CONDITIONS.....	7
1.3.1. Restrictions.....	7
1.3.2. Exclusions.....	7
1.3.3. After Sales Service.....	7
2. INSTALLATION GUIDELINES.....	8
2.1. OPERATING AREA.....	8
2.2. PRECAUTIONS.....	8
2.3. CONNECTION TO THE EXTERNAL AIR INTAKE	9
2.4. CHIMNEY FLUE PREPARATION.....	10
2.5. CHIMNEY FLUE PIPE	10
2.5.1. Examples of chimney flue pipes	10
2.6. COWL	12
3. DIMENSIONS AND TECHNICAL SPECIFICATIONS	14
4. INSTALLATION AND ASSEMBLY	15
4.1. PREPARATION AND UNPACKING	15
4.2. ELECTRICAL CONNECTION.....	15
4.3. SELECTION OF OPERATING MODE.....	16
4.3.1. Natural convection	16
4.3.2. Forced convection (ventilation kit)	16
4.4. GENERAL ASSEMBLY RULES	17
4.4.1. FITTING OF REFRACTORY WALLS (ALUTEC®)	18
4.4.2. INSERT ASSEMBLY	18
4.4.2.1. Removal of the Flue Collar.....	18
4.4.2.2. Removal of the firebox.....	18
4.5. CONNECTION TO THE FLUE PIPE.....	19
4.5.1. DIRECT CONNECTION TO FLUE PIPE.....	19
4.5.2. FLUE DAMPER (NOT SUPPLIED)	20
4.6. INSTALLATION OF CLADDING FRAME AROUND THE STOVE	20
4.7. INSTALLATION OF FINISHING FRAME (OPTIONAL)	20
4.8. INSULATING A WOODEN BEAM	21
4.9. SUMMARY DIAGRAM FOR OPTIMUM CONNECTION OF THE INSERT STOVE	21
5. OPERATION	22
5.1. PRE-LIGHTING WARNINGS.....	22
5.2. CHOICE OF FUEL	23
5.3. FIRST LIGHTING	23
5.4. LOADING THE FUEL.....	24
5.5. CONTROL OF COMBUSTION	25
5.6. EMERGENCY SITUATIONS	25

6. MAINTENANCE AND CLEANING	26
6.1. CLEANING TO BE PERFORMED BY THE USER.....	26
6.1.1. Cleaning the glass	26
6.1.2. Cleaning out the ashes	26
6.1.3. Cleaning the refractory material walls (ALUTEC®)	26
6.1.4. Cleaning the upper deflector (Calorite).....	27
6.1.5. Cleaning of painted parts	27
6.2. CLEANING TO BE DEALT WITH BY SPECIALIZED TECHNICIAN	27
6.2.1. Cleaning flue pipe.....	27

INTRODUCTION

Dear customer,

Thank you for choosing this wood burning cassette stove. We are sure that, with use, you will appreciate the quality of an attentively designed and tested product. Our goal is to combine technology with easy use and, above all, safety.

For best stove operations and to fully enjoy the heat and sense of well-being it will spread throughout your home, we suggest you carefully read this booklet before use. Please contact your dealer for full assistance in resolving any doubts or problems.

Congratulations on your choice and remember, the stove **MUST NEVER** be used by children who should always be kept at a safe distance!

Revisions to the publication

In order to improve the product, the Manufacturer reserves the right to modify and update this publication without prior notice.

Reproduction, even partial, of this manual without the Manufacturer's authorisation is prohibited.

Manual preservation

- Please take care of this manual and keep it in a place that can be quickly and easily reached.
- If this manual should be lost or destroyed, or if it is in poor condition, ask for a copy from your retailer or directly from the manufacturer, providing product identification data.

How to read the manual

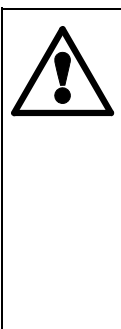
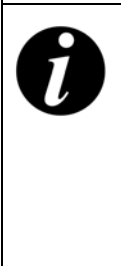
- An essential item or one that requires specific attention is published in **"bold"**.
- *"Italics"* are used for any additional clarification.
- **NOTE:** the "NOTE" provides the reader with additional information on the subject.



This appliance is **suitable for wood burning only**. Only use fully seasoned timber that has been allowed to dry for a period of at least 12 months. Do not use other types of fuel and do not use as an incinerator.

(Refer to section 5.2 for further details).

These symbols signal specific messages in this booklet

	WARNING: This warning symbol found in various points in this manual indicates that the user should carefully read and understand the message to which it refers since neglect to follow these instructions could cause serious fireplace stove damage or injury to the user.
	INFORMATION: This symbol intends to emphasise important information for good fireplace stove operations. Failure to observe these instructions could jeopardise product use and operations may be unsatisfactory

1. WARNINGS AND WARRANTY CONDITIONS

1.1. SAFETY WARNINGS

- Please read these instructions carefully before installing or using this appliance. Failure to do so may result in damage to persons and property.
- Installation of this appliance must be carried out by a suitably qualified competent person in accordance with all Building Regulations, including those referring to Local Authority Bye-Laws, National and European Standards and Codes of Practice.
- Dimplex is not civilly or criminally liable for damages to persons and property arising from incorrect installation or poor maintenance (not compliant with the provisions of this manual).
- This apparatus should not be used by people (including children) with limited physical, sensorial or mental abilities or with little experience and know-how unless they have been instructed on the use of the apparatus by the person responsible for its safety.
- For correct use of the fireplace stove and accessories, and to prevent accidents, always follow the instructions in this booklet.
- The fireplace stove must be used only for its intended purpose. Any other use is considered improper and therefore hazardous.
- The user is fully liable for improper product use, releasing Dimplex from any liability.
- Any tampering with the fireplace stove, or use of non-original spare parts, may be hazardous to the user and releases Dimplex from any liability.
- This appliance operates at very high temperatures and surfaces become hot during use and for a period after use. Avoid direct contact with the stove unless wearing suitable protective clothing (e.g. glove provided). All persons including children and the infirm should be warned of this and not allowed to touch any surfaces while in use. Please use a suitable fireguard to prevent contact when in use.
- Avoid installation in rooms with B type gas devices, hoods with or without exhaust, heat pumps or collective ventilation conduits.
- Do not fit an extractor fan in the same room as this appliance.
- Do not install this appliance on a shared flue.
- Do not install several flue pipes in one room, and avoid having a stairwell in the vicinity. Check that in adjacent connected room there are not any units whose simultaneous use would create negative pressure in one of the two rooms.
- Install the stove in a location which is suitable for fire lighting, and equipped with all services such as air supply, smoke discharge and electricity supply (if forced ventilation kit is used).
- Ensure that there is adequate ventilation in the room in accordance with Building Standards. Do not obstruct any of the air inlets or outlets on the appliance.
- The stove should sit on a non-combustible surface that conforms to Building Regulations. Allow a hearth of 300mm to the front at floor level in case of spills when re-fuelling or de-ashing.
- This appliance is suitable for **wood burning only**. Do not burn petroleum coke or other solid fuels (including coal, ancit, briquettes, etc), household waste or plastic in this appliance.
- Do not use flammable liquids in this product.
- Burn only wood with low moisture content - burning softwood, wet or unseasoned timber will only result in a build-up of tar in the stove and the chimney and will cause staining of the glass.

INFORMATION:

- For any problem, please contact your dealer or qualified and authorised personnel and always request original spare parts for repairs.
- Check and clean the flue prior to installation and have flue cleaned yearly thereafter.
- If there is a fire in the flue pipe, keep the door of the fireplace stove and the combustion air register closed at all times. Request assistance from the emergency services.
- Carefully conserve the instruction booklet. It must remain with the fireplace stove for its entire life cycle. If the stove is sold or transferred to another user, make sure the manual accompanies the product.
- If lost, please request a copy of this instruction from your dealer.

1.2. OPERATING WARNINGS

- Do not use this appliance in the event of faults or poor stove operation. If the stove is over-firing or if there are problems with chimney draught, turn off the air supply to this stove and consult a suitably qualified technician (HETAS Engineer or Chimney Sweep).
- Once installed, never place flammable materials closer than 150 cm to the fireplace stove.

1.3. WARRANTY CONDITIONS

Your stove is guaranteed against defects arising from faulty manufacture, **except for the elements subject to normal wear** listed below, for 2 years from the date of purchase proven by a document that indicates the dealer's name and date of sale and only if the product was installed and inspected by a specialised installation technician (HETAS Engineer or equivalent), according to the detailed instructions indicated in this instruction manual supplied with the product. Upon installation a certificate of compliance must be presented by your installer.

The warranty includes the free replacement or repair of **parts recognised as factory defective**.

1.3.1. Restrictions

The above guarantee does not cover components relating to electrical parts (where fitted), on which the guarantee period is 1 year from the purchase of the product, documented as specified above. The warranty does not cover parts subject to normal wear such as: **gaskets, glass, and all removable fire box parts (including Alutec® and Firebrick)**.

Replaced parts will be guaranteed for the remaining warranty period from the date of product purchase.

Only genuine spare parts must be used for all replacements.

1.3.2. Exclusions

The warranty does not cover any part that may be defective due to negligence or careless use, incorrect maintenance, installation that is not compliant with that specified (see relevant chapters in this manual).

Dimplex refuses to accept any responsibility for any damage which may be caused, directly or indirectly, by persons, animals or property as a result of the failure to observe all the provisions set forth in the instruction booklet, especially those concerning warnings on the subject of installation, use and maintenance of the appliance.

In the event of product inefficiency, please contact your dealer and/or area importer.

Damages caused by transport and handling are not covered by the warranty.

Exclusively refer to the supplied manual for product installation and use.

The warranty is null and void in the event of damage due to tampering, weather, natural calamities, lightning, fire, defective electrical and hydraulic systems and the lack or incorrect maintenance as per the manufacturer's instructions.

1.3.3. After Sales Service

Should you require after sales service or should you need to purchase any spares, please contact the retailer from whom the appliance was purchased. Please do not return a faulty product to us in the first instance as this may result in loss or damage and delay in providing you with a satisfactory service. Please retain your receipt as proof of purchase.

For further information about this product, please contact Dimplex in the UK (Tel: 0845 600 5111) or Dimpco in ROI (Tel 01 842 4833).



Dimplex is not liable in the event the product and any other accessory is improperly used or modified without authorisation.

2. INSTALLATION GUIDELINES

These instructions give a guide for the installation of the stove but in no way absolves the installer from responsibilities to conform to all relevant standards relating to the installation of solid fuel appliances.

We recommend that for UK installations a HETAS registered installer should be used, who will be able to give a Certificate of Compliance to prove that installation complies with Building Regulations. In Ireland a registered installer from the Irish National Fireplace Organization should be used.

2.1. OPERATING AREA

For good operation and good heat distribution, your stove should be installed in a room that is large enough for heat to circulate. To allow sufficient area for heat dissipation and prevent room overheating, **the room volume must not be less than 60 m³.**

Please note:



- **Fireplace stoves may not be installed in bedrooms, bathrooms or where another heating device is installed without autonomous air flow (fireplace, stove, etc.).**
- **Placing the fireplace stove in explosive environments is prohibited.**
- **In all instances the stove should be positioned on a non-combustible hearth. The construction of the hearth must conform to Building Regulations, must be firm, non-combustible and capable of supporting the stove.**
- **A protective hearth must provide an apron of 300mm to the front of the stove at floor level in case of spills when refuelling or de-ashing.**
- **The walls surrounding the stove should be made from non combustible materials where possible and at all times minimum safe distances to combustibles (100mm to sides and rear) must be observed.**
- **A minimum air gap of at least 5mm should be observed from any masonry, brick or other non flammable type walls surrounding the stove.**

2.2. PRECAUTIONS

The fireplace stove must be installed in a suitable location that permits routine opening and maintenance operations. The room must be:

- suitable for stove operating conditions
- equipped with an adequate smoke exhaust system
- equipped with outdoor ventilation



IMPORTANT!

- The fireplace stove must be installed and assembled by qualified personnel.
- The fireplace stove must be connected to a flue pipe or other vertical smoke stack that can discharge smoke at the highest point of the house.
- The fireplace stove must be connected to a flue pipe or an internal or external vertical duct conforming to Building Regulations.
- Smoke is generated from burning wood and, therefore, may dirty adjacent or nearby walls.
- Before positioning the fireplace stove, you must make a hole for the intake of external air.

2.3. CONNECTION TO THE EXTERNAL AIR INTAKE

The room where the stove is installed must have a constant supply of combustion air in compliance with local Building Regulations. Combustion air must be provided (in addition to normal room ventilation) through open vents in the walls near the fireplace stove. These vents must not be obstructed in any way.

For this purpose, we recommend the stove is be provided with a permanently open vent of minimum open section **100cm²** for the supply of combustion air, protected by an indoor and outdoor grille. A larger vent may be used if it is also required to supply room ventilation in addition to combustion air (refer to local Building Regulations).



It is extremely important to comply fully with providing vents for combustion air, otherwise the lack of oxygen during stove use may compromise the safety of the installation.

The air intake must:

- directly communicate with the installation area
- be protected by a grille, made of metallic anti-insect mesh or a suitable protection as long as it does not reduce the minimum section.
- be installed so as to avoid obstruction
- increase in duct size by 5% for duct lengths between 0.5m to 3.5m. For duct lengths over 3.5m the duct size should be increased by 15%.



Remember that the ventilation grills always have a cm² useful section on one side. When selecting the grill and hole dimension, make sure the useful grill section is greater than or equal to the section required for product operations.



IMPORTANT!

Air flow may also be obtained from a room adjacent to the installation room as long as this flow is free through permanent apertures that directly communicate with the outdoors; avoid air outlets connecting with heating units, garages, kitchens or bathrooms.

2.4. CHIMNEY FLUE PREPARATION

The connection to the chimney flue is a very important element. Before installing, check the chimney flue is in good condition; dry and free from cracks and obstructions. The diameter of the chimney flue should not be less than 180mm and not more than 220mm in diameter. If any of these requirements are not met, the chimney should be lined by a suitable method by a qualified person.

The chimney height and the position of the chimney terminal should conform to Building Regulations. If you have any doubts about the suitability of your chimney, consult your local dealer or stockist.

The chimney must be swept before connection to the stove and should be swept yearly thereafter.



Do not install this appliance on a shared flue.

2.5. CHIMNEY FLUE PIPE

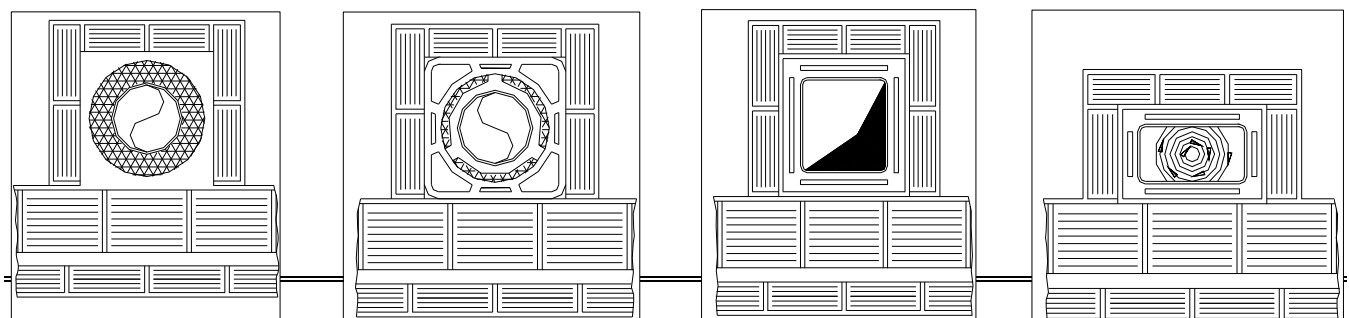
The chimney flue pipe is a **fundamental element** in discharging smoke and therefore must have the following requisites:

- It must be waterproof and thermally insulated.
- It must be made with heat resistant materials, resistant to combustion products and any condensation.
- It must have a vertical slope where possible with axis deviations not over 45° and without narrowing.
- It must meet the requisites indicated in the technical table for the internal chimney section and height.
- It must preferably have a circular interior section.
- It must be cleaned before installation and at least once yearly thereafter.



The flue pipe is of primary importance for the correct functioning and safety of your fireplace stove.

2.5.1. Examples of chimney flue pipes



AISI 316 stainless steel flue pipe with dual chamber insulated with ceramic wool or equivalent resistant to 400°C.

EXCELLENT

Flue pipe in refractory brick with insulated double wall and external coat of cement mix lightened with honeycomb material such as clay.

GOOD

Traditional square section clay flue pipe with insulating hollow inserts.

GOOD

Avoid flue pipes with internal rectangular sections whose larger side is double the smaller such as 20x40 or 15x30.

AVERAGE

Square or rectangular section flue pipes must have rounded internal corners with radius not less than 20mm. For the rectangular section, the ratio between internal dimensions must be ≤ 1.5 .

The recommended section for a flue pipe according to its length is listed in the table below:

Height (m)	Useful section (cm ²)
Up to 5 m	600 (20x30 cm o Ø 22 cm)
Between 5 and 7 m.	400 (20x20 cm o Ø 20 cm)
Over 7 m	324 (18x18 cm o Ø 18 cm)

N.B. Too small or too large a section reduces draught and insulation.

Where the chimney flue is not vertical or access for cleaning is restricted, the chimney flue should be equipped with a solid material collection chamber at the flue base to be easily opened with an airtight door.



IMPORTANT!

In the event of doubt on your chimney flue operations or that its dimensions are different from those recommended, we highly suggest an authorised technician inspect and measure chimney flue performance.

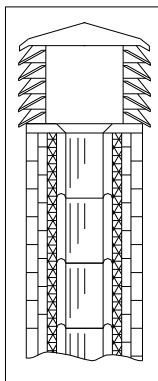
The company shall not be held liable for poor operation of the fireplace stove that is due to a flue pipe of improper size or installation that does not comply with this instruction booklet and Building Regulations.

2.6. COWL

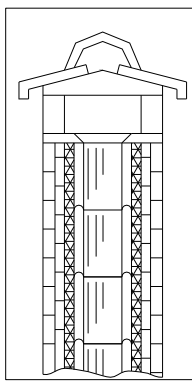
If incorrectly specified, the type of cowl used can be a severe impediment to correct "chimney system" operations. **Flue pipe draught also depends on its cowl.**

If your cowl is hand-made, the exhaust area must correspond to **more than twice the internal section of the flue pipe.**

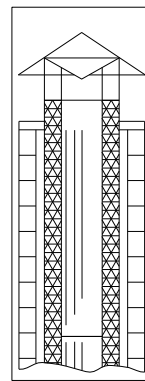
Having to exceed the peak of the roof, the cowl will be exposed to wind. The most suitable type of cowl will depend on your location, therefore seek assistance from your installer.



An industrial cowl, with prefabricated sections fitting together, allows optimal disposal of the flue gases.



A traditional handmade cowl. The right exhaust section must be at least twice the internal section of the flue pipe, 2.5 times is ideal.



Steel cowl for flue pipe with internal smoke deflector cone.

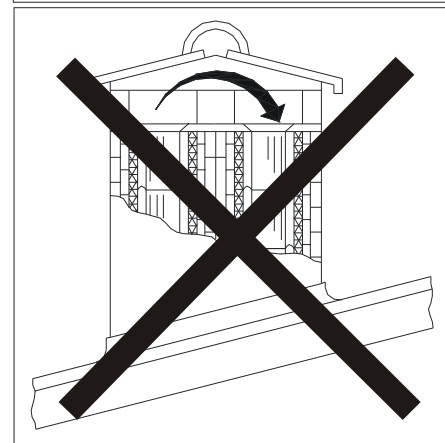
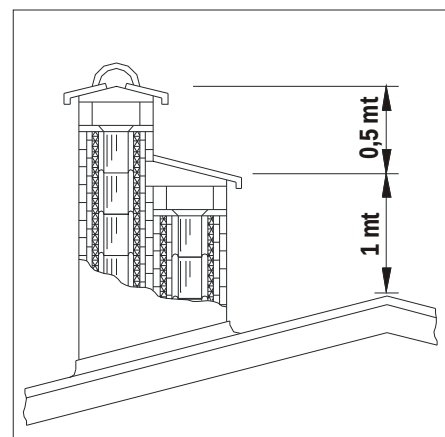
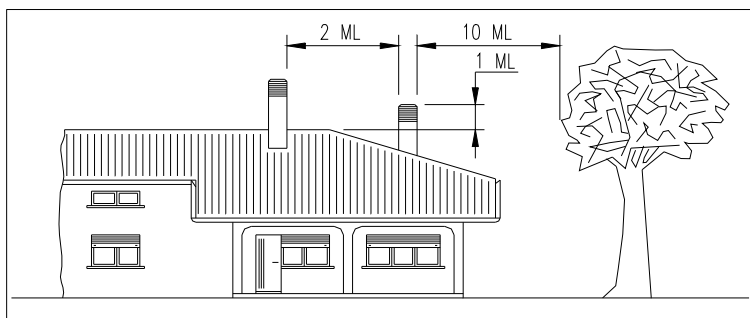
The cowl must meet the following requisites:

- It must comply with Building Regulations.
- It must have an internal section equal to that of the chimney.
- It must have a useful output section not less than double that of the internal section of the flue pipe.
- It must be built to prevent rain, snow and any foreign objects from getting into the flue pipe.
- They must be installed to guarantee adequate smoke dispersion and out of the reflux area where negative pressure forms.

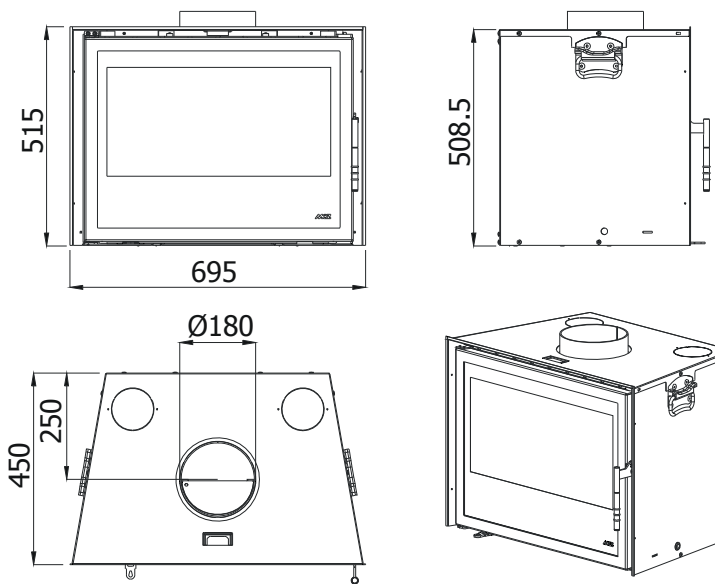


For paired flue pipes, the cowl for solid combustion and the one for the upper floor must be at least 50cm higher than the other to avoid pressure transfers between paired flues.

The cowl must not have obstacles within 10 m such as walls, roof slopes and trees. Otherwise, raise it at least 1 m over the obstacle and, in the event of other nearby cowls, keep them at least 2 m away. In any case, the cowl must exceed the peak of the roof by at least 1m.



3. DIMENSIONS AND TECHNICAL SPECIFICATIONS

DC700		Technical specifications	
		Fuel type	Wood
		Hourly consumption	2,1kg/h (load 1,7 in 50 min)
		Nominal thermal power	kW 8 Kcal 6880
		Efficiency	83.7%
		Recommended draught	12 Pa / 0,12 mbar
		Smoke temperature	240°C
		Smoke outlet	Ø 18 cm
		Fire box dimensions	45x18 H17 cm
		Net weight	100 kg
		External combustion air outlet	cm² 150
		CO emission in smoke (13 %O ₂)	0.11%
		Flue Gas Mass Flow	6.7 g/s
		Flue pipe	
		Up to 5 m	20x30 cm Ø22
		Between 5 and 7 m.	20x20 cm Ø20
		Over 7 m	18x18 cm Ø18
		Note	
		Intermittent Burning Appliance. Do not install this appliance on a shared flue.	

4. INSTALLATION AND ASSEMBLY



IMPORTANT!

The fireplace stove must be installed and connected to the chimney flue only by a specialized technician, so that all local and national regulations are complied with.

Installation must in any case be carried out in compliance with Building Regulations.

When the fireplace is unpacked, **check for perfect operation of all its parts or any damage which may have occurred during shipping. The retailer or the carrier must be immediately informed of any damage.**

If the fireplace stove is installed in a place that is difficult to reach, its weight can be reduced by removing the internal parts that make up the fire box. However, **be sure to put all of the parts back in place. This operation is to be carried out only by specialized personnel.**

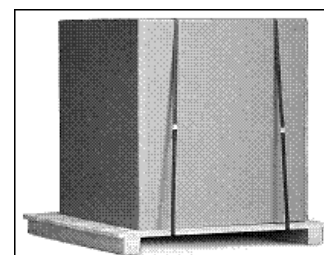
The company shall not be held liable if the preceding warning is not complied with.

4.1. PREPARATION AND UNPACKING

Open the packaging, remove the stove unit from the pallet and position it in the chosen location, taking care that its position complies with the above instructions.



The fireplace stove must always be kept in a VERTICAL position during handling, using the appropriate handles located on the sides.



Example of fireplace stove packing

Be especially careful that the door and its glass are protected from mechanical collisions that could jeopardise their integrity.

Moving the product must be done with care. If possible, unpack the fireplace stove in the area where it is to be installed.

The materials which make up the packaging are not toxic or harmful, so no special procedures for disposal are required.

The final user must store, dispose or recycle packaging material in accordance with local regulations.

4.2. ELECTRICAL CONNECTION

If the optional forced ventilation kit has been specified, before positioning the stove insert, a 230V - 50 Hz electrical power outlet must be prepared near the insert in order to connect the electrical cable that powers the forced ventilation fans.

The socket must be fitted with earth and must be accessible at all times to cut off power when servicing equipment. The socket must be protected from heat given through stove operation – observe safe distances to combustibles at all times.



IMPORTANT!

Connection of electrical cables should only be carried out by a suitably qualified engineer or electrician. The ventilation kit must be connected to a bipolar switch complete with fuses.

When preparing the connection of the electric cable provided with the Forced Ventilation kit, be very careful not to crush the cable while inserting the product. This could cause short circuits that can damage the entire electrical system.

Make sure that the cables do not come into contact with the hot metal parts of the structure, as they could melt and short circuit the electrical system.

The motor and the thermostatic switch must be accessible when installed in the stove for maintenance or repair.

4.3. SELECTION OF OPERATING MODE



IMPORTANT!

With either **NATURAL CONVECTION** or with **FORCED VENTILATION** it is necessary to provide connection to an external air intake. Do not for any reason obstruct the air intakes if the fireplace stove or ventilation kit is in operation.

Your DC700 is designed to use convection currents within the double-skinned casing of the product to draw cold air in at the base of the stove which emerges as heated air from the vents above the door. This effect circulates the heat from the product more effectively than relying on radiant heat only.

Where installation permits, the DC700 can be built into an opening that incorporates additional convection space around the outer casing to enhance **Natural Convection**. Alternatively the convection effect can also be enhanced through use of a **Forced Ventilation Kit**.

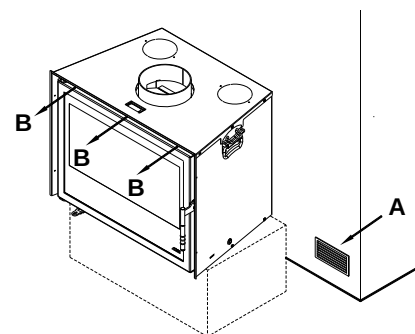


Figure 1 – Natural convection

4.3.1. Natural convection

If this system is chosen, an air intake must be prepared (A) below the stove, that has a free passage surface of at least 150 cm² to allow the natural fresh air flow into the installation cavity and around the stove body. The air for the natural convection ventilation (B) will exit from the front part in the opening between the firebox and the outer cladding and will be uniformly dispersed throughout the room (fig.1).

4.3.2. Forced convection (ventilation kit)

A Forced Ventilation kit can be installed to supplement the natural convection of the room and circulate the heat where room convection is low. For this system an air intake must be prepared (fig 1. A) below the stove, at east 150cm² free area same as for natural ventilation. Once installed, a built in temperature sensor turns the fan unit on when the motor ambient reaches 50/60°C. This in turn circulates air around the stove and into the room to help the convection process.

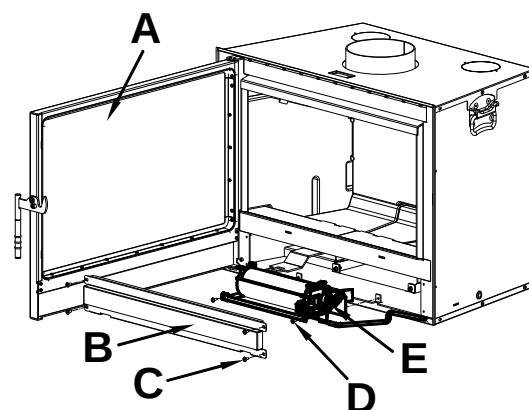


Figure 2 - FV kit assembly



The motor and thermostatic switch should be checked when they are installed and wired up to ensure correct operation of the motor. To check the operation use a hairdryer (or similar heat device) to direct hot air at the temperature sensor. The motor should switch on when the temperature sensor reaches a temperature 50/60°C. **Do not use naked flames (matches, lighter, etc) to check the sensor operation as these can damage irreparably the motor, wires or sensor.**

The time taken for the motor to switch on will vary for each burn cycle depending on type and amount of fuel used (see paragraph "5.2 choice of fuel"). If the motor fails to switch on during normal burning it may be indicative of some other problem with the combustion process (e.g. poor flue draught or air convection or insufficient combustion air, etc).

KIT ASSEMBLY:

Open the door and unscrew the fixing screws C to remove the protective motor cover B (fig. 2). Carefully place the motor ventilation kit inside the stove chassis taking care that the motor or temperature sensor contacts to not get damaged or come into contact with stove body. Use fixing screws provided to secure the kit to the chassis at fixing points D. Feed the motor cable through the rubber grommet on the side of the stove until it meets the stop on the cable (fig. 3). Reassemble the motor cover using fixing screws C.

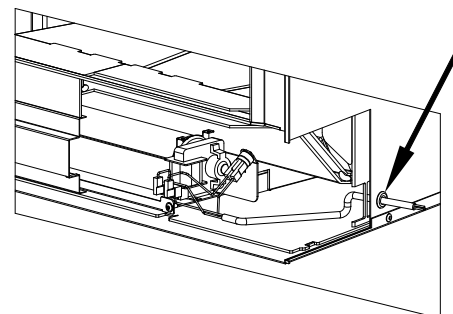


Figure 3 - FV kit assembly detail

4.4. GENERAL ASSEMBLY RULES

The stove insert can be installed either in an existing suitable firebox cavity (of solid wall construction) or installed within a purpose-made structure.

If the fireplace stove is positioned in an existing firebox cavity, check that the dimensions of the firebox are compatible for insertion.

Always leave a minimum 10 mm airspace between the stove and any adjoining walls of solid wall construction (i.e. made of solid block, masonry, brick or concrete). This is required to allow the stove body to expand/contract during use.

For purpose built structures, please comply with the following minimum safe distances from combustible materials (as shown in Fig 4).

- 50 mm air + 50 mm insulation from the side, the back and the top.
- Non Combustible surface on the bottom.



If the stove is positioned over a floor or close to walls made of flammable materials, it is advisable to use sufficient insulation.

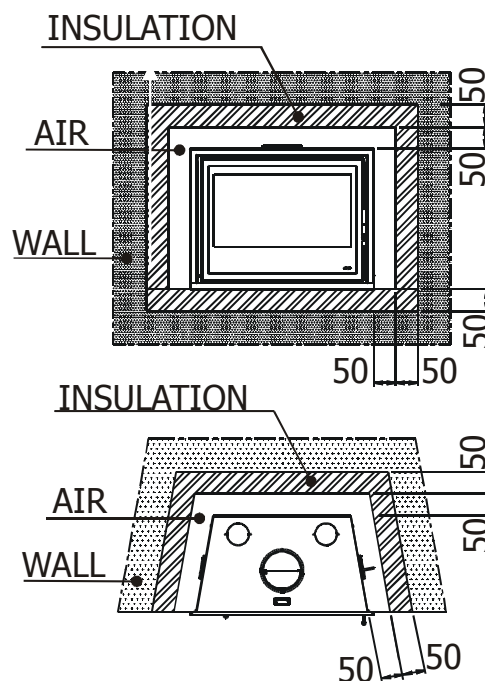


Figure 4 - Minimum Clearance to Combustibles (Purpose Built Structure)

The stove can be installed at a desired height above the ground provided there is suitable support structure in place. In all instances the stove should be positioned on a non-combustible surface that conforms to Building Regulations. Allow a hearth of 300mm to the front at floor level in case of spills when re-fuelling or de-ashing.

The walls surrounding the stove should be made from non combustible materials (**e.g. block, brick, concrete, fire-rated plasterboard construction, etc**) and at all times minimum safe distances to combustibles must be observed.

We recommend installing the outer body of the stove first in the required cavity (see section 4.4.2 to remove firebox).

4.4.1. FITTING OF REFRACTORY WALLS (ALUTEC®)

To protect against damage during shipping, the rear refractory firebrick (inner ceramic wall) is not in place and must be installed before the stove is used.

To install the rear brick first open the door and remove the upper deflector in Calorite **B**. Hold the rear brick in place with the smooth side facing out and slide the holding brackets down either side of the brick to secure in position against the side bricks.

To facilitate stove installation all of the refractory firebricks may be lifted out of the stove to make it lighter for handling. **Please handle the refractory firebricks very carefully as they are brittle and may crack or chip if handled roughly.**

Sequence for Removing Refractory Walls:

First remove the upper deflector B and then the rear brick. Lift out the left hand side brick followed by the 3 base bricks. Remove the right hand side brick last. Refit in reverse sequence.

4.4.2. INSERT ASSEMBLY

To facilitate insertion of the insert, the firebox can be removed from the outer cladding or and the flue collar can be removed to facilitate the connection to the flue pipe.

4.4.2.1. Removal of the Flue Collar

Open the stove door, remove the upper deflector in calorite **B** and unscrew the screws that tighten the flue union **D** (fig.5); after creating the connection to the flue pipe and inserting the fireplace stove, reinstall the union **D** being careful to connect it correctly with the flue pipe tube, tighten the screws properly and reposition the deflector in calorite **B**.

4.4.2.2. Removal of the firebox

After removing the flue collar, continue by removing the protective panel **A** by unscrewing the locking screws and then remove the fixing screws (**C**) that hold the firebox to the outer cladding; at this point the firebox can be separated from the outer cladding by sliding it forwards to facilitate the assembly.

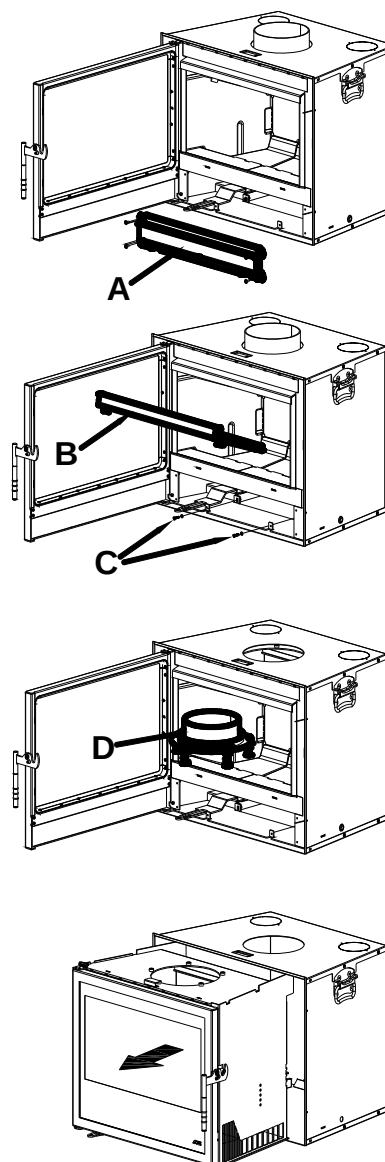


Figure 5 – Insert removal

4.5. CONNECTION TO THE FLUE PIPE

The connection must be made with a great deal of care; in the event of poor construction or assembly, it is extremely difficult to remedy without damaging the installation. In addition, the connection is made in a part of the stove where temperatures are very high, and for this reason it is important to use materials that are capable of resisting heat and also the acidity of the fumes produced by combustion.



Before beginning work, please note the following:

- The chimney flue should be vertical wherever possible to offer least resistance for passage of flue gasses. Where a bend is necessary, it must have a slope no greater than 45 degrees to the vertical. This is to minimise the build up of soot and condensates in the flue. It also keeps the release of smoke from being slowed down.
- **Connection of the stove to the main chimney shaft should be made using clay flue pipe, Cast Iron, 316 grade stainless steel or vitreous enamelled steel, nominal thickness 1.2mm.**
- **If metal connecting pipes are used, they must be insulated with suitable material such as ceramic fibre matting, to avoid deterioration of any nearby masonry or plasterwork.**
- **It is prohibited to use flexible stainless steel or aluminium hoses as they compromise the safety of the connection and are subject to tears and gaps, causing leakage of smoke.**
- The components making up the connecting pipe must be perfectly sealed using fire cement or other high temperature sealant.
- The joint to the flue pipe must not be too long (to avoid obstructions), nor too short (to avoid smoke leakage).
- Note that all flue sockets must face upward.



IMPORTANT!

Any increase in the section of the connecting pipe must start immediately above the hood of the fireplace and not along the flue pipe section

When installation is complete, the smoke connection must be insulated with ceramic fibre matting or material that is resistant up to at least 600°C.

Carry out any infilling necessary in order to prevent soot or ashes from the chimney flue from settling above the insert (fig. 7).

Do not install this appliance on a shared flue.

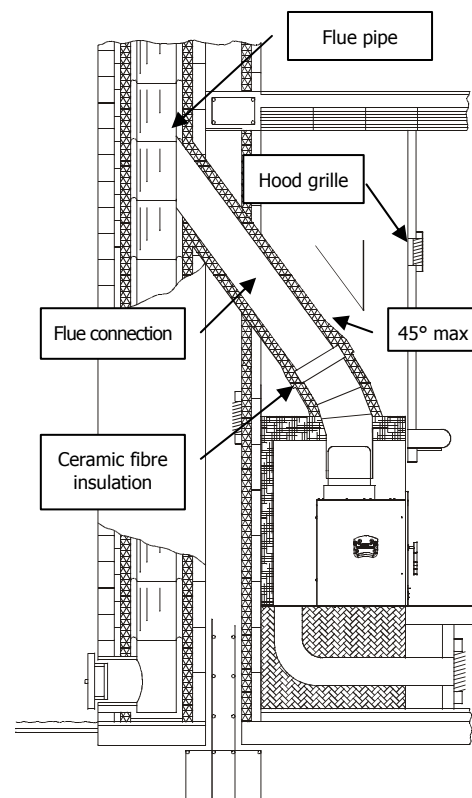


Figure 6 - Example of fireplace stove connection with a chamber and sealed door for solid combustion product collection and discharge at the foot of the external ascending segment.

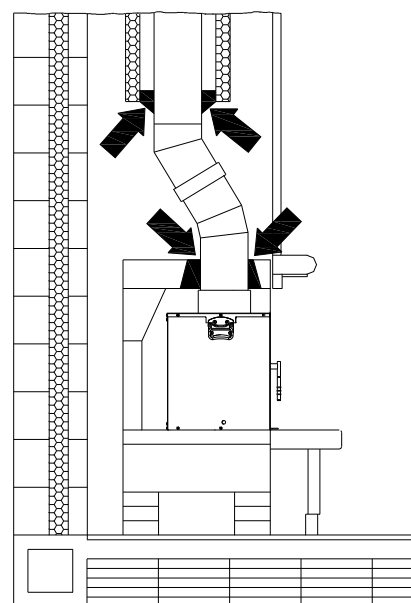


Figure 7 – Direct connection to the flue pipe

4.5.1. DIRECT CONNECTION TO FLUE PIPE

Engage the elements in the chimney flue, being careful not to exceed the 45° inclination and to correctly carry out any infilling necessary in order to prevent soot or ashes from the chimney flue from settling above the insert (fig. 7). Make sure flue sections maintain safe distance or are suitably insulated against contact with combustible materials.

4.5.2. FLUE DAMPER (NOT SUPPLIED)

In case of excessive draught in the flue chimney, combustion may become unbalanced and consequently less efficient. In this case, in order to improve combustion efficiency, it is advisable to install a flue damper directly above the output of the fireplace stove (fig.8).

When the damper is set in the open position the chimney draws at full draught. Shutting the damper restricts the flow, slowing the rate of burning.

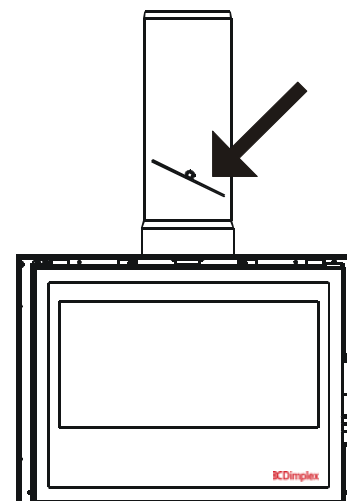


Figure 8 – Flue Damper Position

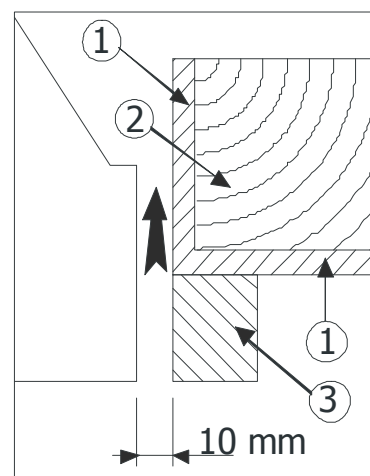
4.6. INSTALLATION OF CLADDING FRAME AROUND THE STOVE

The stove support structure and the parts of the cladding must be attached to one another **WITHOUT COMING INTO CONTACT WITH THE STEEL OUTER CASING** to prevent transmission of the heat to any decorative surfaces (e.g. Marble).

Use care with wood finishes such as beams or shelves, these must be suitably insulated. In particular, shelves must be placed at a distance of not less than 30 cm from the upper part of the unit.

We recommend making the stove cavity liner in fire-resistant plasterboard of 15/20 mm thickness, with a self-supporting frame in galvanised profile, so as not put weight on components of the cladding (such as wooden beams and marble architraves) which do not have a load-bearing structure and to make it easy to work in the event of future anomalies and/or maintenance.

Dry install the fire bed of the **cladding, leaving an aperture of 10mm** between the fireplace stove and the fire bed to provide insulation (fig.9).



THERMAL PROTECTION OF CROSSBEAM

1. Insulation applied or to be applied.
2. Wood beam
3. Marble or other material

Figure 9 – Insulating a wooden beam

4.7. INSTALLATION OF (OPTIONAL) FINISHING FRAME

An optional finishing frame can be assembled on DC700, which covers either three or four sides of the product depending on installation. This optional frame (available from your DC700 retailer) is assembled at the end of installation and after the cladding has been completed and is anchored directly to the insert structure. This frame is designed to finish and cover the crack that is formed between the metal structure of the fireplace stove and the wall.

For frame assembly proceed as follows (fig.10):

- Remove door **A** by unscrewing the two screws **B** on the upper part of the fireplace stove
- Insert the frame **C** until it comes into contact with the cladding and fasten it with the four screws **D**
- Reinstall the door **A** inserting it in the pin of the lower hinge and fasten it with the screws **B**

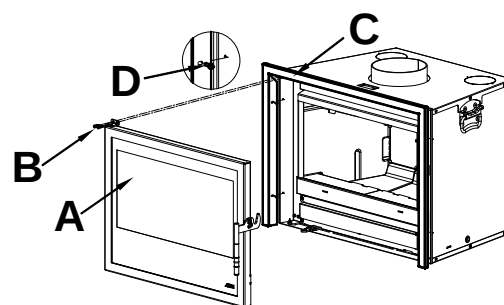


Figure 10– Frame assembly

4.8. INSULATING A WOODEN BEAM

If there is a shelf or beam made of wood or other combustible material above the hot air outlet opening, **it is absolutely necessary to protect it** with panels made of suitable insulating material (e.g.: calorite). To attach the protection, fix the protective panels to the underside of the beam using appropriate wood screws (fig.11).

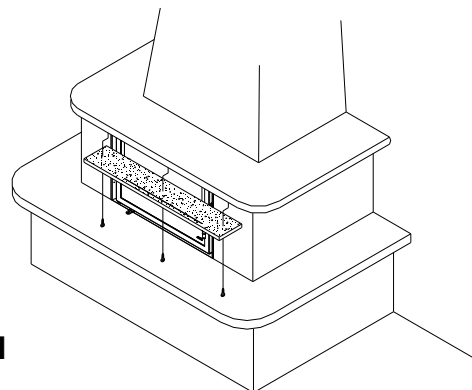


Figure 11 – Beam protection kit assembly

4.9. SUMMARY DIAGRAM FOR OPTIMUM CONNECTION OF THE INSERT STOVE

The installation described below (fig.12) is the optimum set up for inserts assembled on old or new fireplaces. The insert must never be walled up completely but positioned 10mm away from any masonry surface since it needs to be able to expand when it is hot; furthermore, if it is walled up there is a significant drop in air circulation around the stove and the effective output is reduced.



The structure must be insulated thoroughly if there are parts of the construction in wood or other flammable material. Observe safe distances to combustible materials at all times.

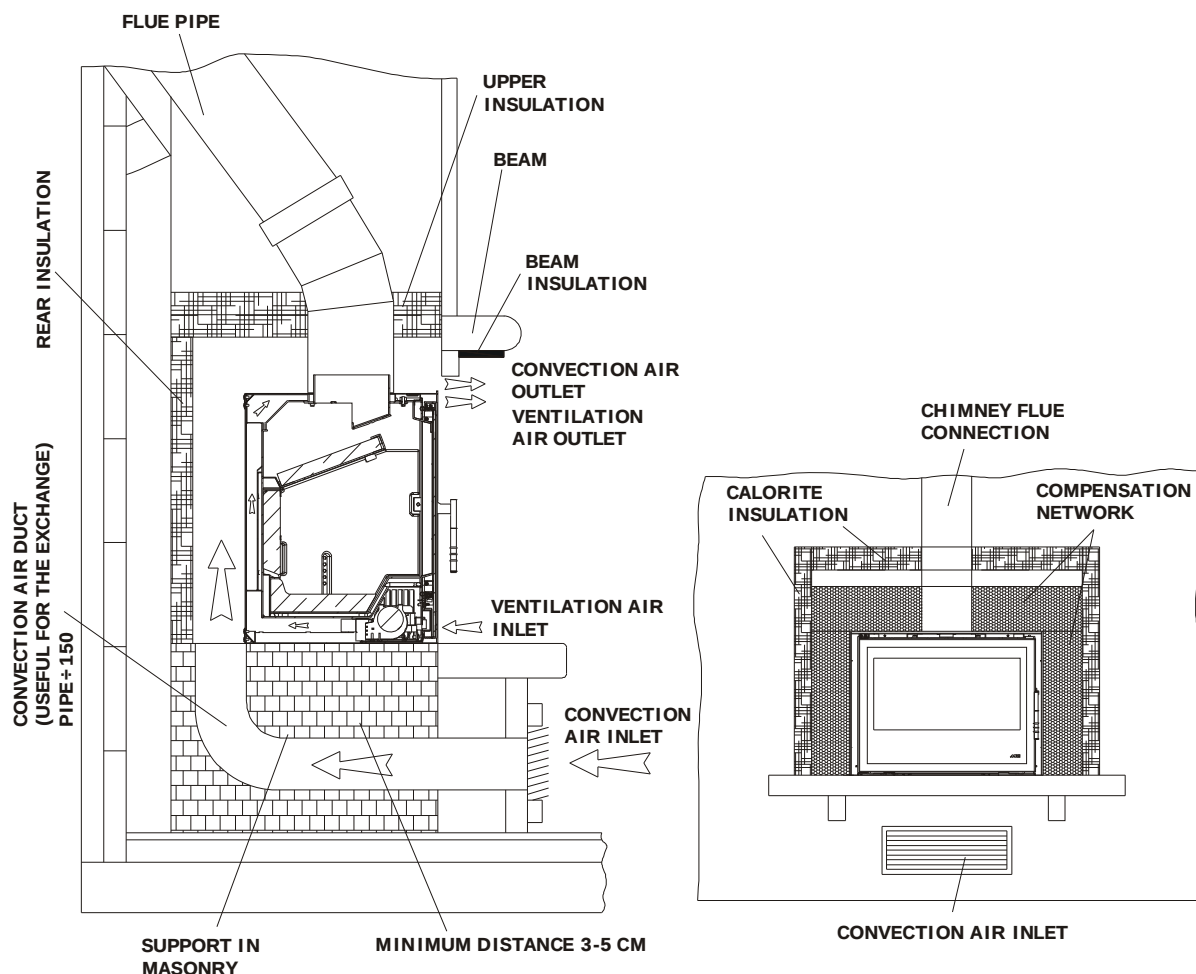


Figure 12 – Optimum stove set up.

5. OPERATION

5.1. PRE-LIGHTING WARNINGS

Make sure you have read and completely understood the contents of this instruction booklet.

Remove all accessories and parts that could burn from the firebox and from the door.

Remove the stickers from the ceramic glass or the high temperature could melt them and irreparably damage the glass. In this case, the company warranty does not cover the glass.



Avoid touching the stove paintwork when it is lit for the first time. During the initial firing of the stove the paint cures and hardens. If the paint is touched during this period, you may expose the steel surface.

Provide plenty of ventilation in the room during the initial firing, as the stove may give off a small amount of smoke or fumes during the curing process

If necessary, touch up the paint with the aerosol spray in the original colour (see "Fireplace stove accessories and inserts")

Do not stay near the fireplace stove, and as previously mentioned, ventilate the room. The smoke and the smell of paint will vanish after about one hour of operation. There are no health risks involved.

During start-up and cooling, the fireplace stove is subject to expansion and contraction; therefore, you may hear slight creaking noises.

This phenomenon is absolutely normal, the structure being made of sheet steel, and must not be considered a fault.



It is very important not to bring the stove up to full heat immediately. Bring it up to temperature gradually.

This avoids damages to welds and the steel structure.

Do not demand full heating performance straight away!

5.2. CHOICE OF FUEL

To obtain the maximum performance from your Dimplex stove, it is of primary importance to use **wood with suitable characteristics**.

It is advisable to use wood for heating such as **beech, birch, oak or ash** with good calorific energy, or logs of pressed wood that **do not have resin**. **These have a high calorific power and must be used with caution to avoid overheating which could damage the stove.**

It is less advisable to use fuels such as **poplar, pine, lime tree, or chestnut** which have low calorific power, since they are soft wood and also they do not burn for a long time.

Avoid using fuels such as **pine or fir** as they contain a high degree of resin and their combustion may substantially soil the fire mouth and the ceramic glass; also, they do not have a high calorific value.

Even when using the recommended wood types the calorific energy they contain will be affected by their moisture content.

Only use fully seasoned timber that has been allowed to dry for a period of at least 12 months.



Do not use treated fuels (such as painted or varnished wood, or particle board) or unsuitable materials (such as plastics and derivatives), which could release toxic or polluting substances. Do not burn rubbish.

The gases produced by combustion due the use of unsuitable fuels cause damage to the fireplace stove and the chimney, they cause pollution and can compromise your health.



A high percentage of moisture in the wood produces condensation in the smoke duct and causes an alteration in the draught. The smoke generated from damp wood can cause a significant deposit of soot on the glass of the door and in the flue pipe with a possible risk of a chimney fire later on.

5.3. FIRST LIGHTING

It is advisable to approach the first lighting with caution, using good-quality, well-seasoned wood.

The primary air inlet must be fully open. Do not use alcohol, petrol, or other volatile flammable substances. On first lighting, fumes and unpleasant smells may be given off, caused by curing of the paint; this is not hazardous to the health, and it is sufficient to ventilate the room adequately. Once combustion has started, pieces of wood of normal size may be added.

The flame must have as far as possible a smooth and laminar flow. **On the various occasions when the stove needs reloading, the door should be opened slowly, to avoid blowbacks of smoke into the room.**

Wood drying time (e.g. beech)	% moisture	Heat power Kcal/h
Freshly cut	50	/
3 months	40	2410
6 months	35	2700
9 months	30	2900
12 months	25	3150
15 months	20	3400
18 months	15	3710
21 months	10	3980

Figure 13 – Calorific energy (e.g. beech) in relation to moisture contained.

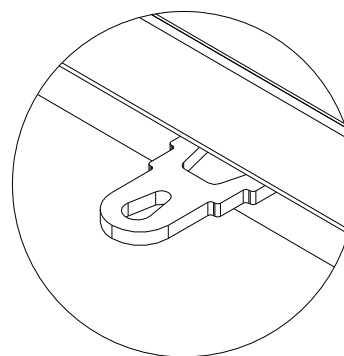


Figure 14 – Air register

Proceed as follows:

- Place a small amount of balled paper in the stove.
- Cover the paper with a small quantity of twigs and a few pieces of wood.
- Open the primary air register completely (fig.15 A)
- Light the paper, and if necessary leave the door open; when the twigs are burning, the door can be closed.
- Only once the flame is burning well (presence of a bed of ash and full combustion) should the air register be moved to the desired setting (see fig.15, section 5.5).

As the fire burns, add wood. Never overload the fireplace stove with wood (see technical specifications in the table, Section 3).

As soon as the flames have died down and a bed of ash has formed, load the stove normally. Small loads of wood are preferable to large ones for combustion.



Attention

- Do not use volatile, flammable substances (petrol, alcohol etc.) for lighting the fire.
- Do not use fuels which could release toxic substances or pollutants.
- Do not put the fire out by throwing water on it.
- Check the external and internal air intakes, and the flue pipe, at least once a year, arranging for them to be cleaned.
- During use, the metal parts and the glass reach high temperatures. For all jobs of loading the stove, adjustment or cleaning the ash drawer, use the insulating glove provided.
- Never leave children unattended near the fireplace stove when it is in use.
- The risk of burns from contact with hot surfaces is very high.

5.4. LOADING THE FUEL

For normal fuel loading, open the fire door by turning the handle and pulling the door towards you.

During use, the metallic structure, the handles and the glass become very hot. Use the thermal glove provided when handling these parts.

During normal use, always keep the fire door completely closed, since intermediate positions cause abnormal combustions (forge effect), rapid consumption of wood and a drastic reduction in the heating efficiency of the unit.

Open the door only to add fuel, and only for brief periods of time.

The fireplace stove works best and provides the greatest heat output when the door is closed, because the sealed combustion chamber and the calibrated inlet of oxygen allow increased performance.

5.5. CONTROL OF COMBUSTION

The stove has an inflow on the front of the firebox that permits the entry of the primary and secondary air required for combustion. The settings for the air input are displayed in **Fig 15**.

PRIMARY AIR

The Primary air is controlled between the air register setting fully open (**A**) to centre (**B**) position. At position (**A**) the primary air is at maximum input. The primary air is reduced by pushing the air register in until position (**B**) where the primary air is closed.

Between positions (**A**) and (**B**) the Secondary air is at maximum input and cannot be reduced.

The air register should be moved to position (**A**) for lighting the stove. Once the flame in the fireplace stove is burning well, push the register until the knob reaches the centre position (**B**).

SECONDARY AIR

The secondary air input is only controlled between the air register settings centre (**B**) and fully closed (**C**). At setting (**B**) the secondary air input is at maximum. To reduce the secondary air push the register in until it reaches position (**C**) where it is closed.

The Primary air input is closed between positions (**B**) and (**C**).



In normal conditions of use, dirt deposits on the glass at lighting, but disappears as soon as the combustion chamber is hot enough.

The use of damp or treated wood emits a higher quantity of smoke than normal that can dirty glass faster. Also the low performance of the flue pipe can jeopardise glass cleanliness since smoke remains in the combustion chamber longer than normal.

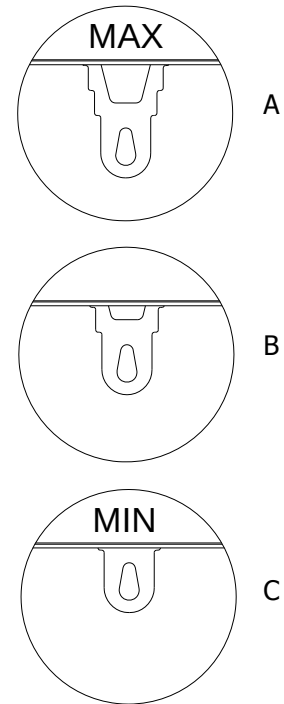


Figure 15– Air Register Control

5.6. EMERGENCY SITUATIONS

If for any reason the stove fire needs to be suddenly and quickly put out or a fire in the flue pipe needs to be put out, proceed as follows:

- The equipment door must be kept closed.
- Disconnect the power supply and do not use water (shock hazard).
- Contact the emergency services.

6. MAINTENANCE AND CLEANING



ATTENTION!

All cleaning operations of all parts should be conducted with the fireplace stove cold.

6.1. CLEANING TO BE PERFORMED BY THE USER

6.1.1. Cleaning the glass

The stove glass may become dirty during start up lighting period or if damp wood is used. The glass should burn clear again when the stove chamber reaches its optimum operating temperature.

If there are any un-burnt residues left on the glass after burning these may be cleaned off when the stove has cooled. To clean the glass, use a soft cloth dampened with water and glass cleaner. Do not use abrasive substances as these may damage the glass.



ATTENTION!

Do not spray cleaning products on the painted parts or on the gaskets of the door (ceramic fibre cord)

6.1.2. Cleaning out the ashes

This must be done when the fireplace stove is off and cold.

It is advisable to adequately clean the fire bed for proper combustion.

To remove the ashes from the fire bed, use a metal scoop and brush. Place the ashes in a non-flammable container for transport.

Ashes that are still hot should be kept outdoors with great care, and not placed in a waste container. Leave them to cool down in the open air in a metal container.

6.1.3. Cleaning the refractory material walls (ALUTEC®)

These do not require any cleaning, since the feature of this material (ALUTEC®) is that it does not absorb soot but rather repels it when the fire box is hot.

During the lighting period the stove chamber may tend to blacken, particularly if the wood is not fully dried. However when the chamber reaches optimum internal temperature (~ 400° C) the refractory wall materials will gradually turn white again as the soot is burnt off.

If this does not happen, it may be due to the following:

- Humid or resinous wood that does not release enough heat or that dirties the combustion chamber (*see chapter 5.2*)
- Flue pipe with poor performance resulting in smoke remaining too long in combustion chamber, dirtying the fire box.
- Flue pipe with poor performance which does not allow fireplace stove to reach high yield that result in adequate temperature of the refractory material.



Never clean the refractory material with a damp cloth or anything else, as it may be stained.

Use a dry paintbrush if necessary to remove heavy soot build-up.



If the Alutec does not whiten, it is not to be considered as a defect in light of the warnings and instructions above.

6.1.4. Cleaning the upper deflector (Calorite)

This does not require particular care. With prolonged use, however, the effective but porous material of which the deflector inside the firebox is made can wear out or become damaged. It should be replaced if it becomes damaged or if it cracks.

6.1.5. Cleaning of painted parts

Do not clean the painted parts with wet rags when the unit is in operation or hot in order to prevent thermal shock to the paint which may cause it to detach. Do not use abrasive or aggressive products or materials. Clean with damp cotton or paper towels.



The silicone paints used to paint products have top quality technical properties that make them resistant to very high temperatures.

There is however a physical limit (380°-400°) beyond which the paint begins to fade or (over 450°) to vitrify; it may then flake and detach from the steel surface. If these effects are noticed, this means temperatures have been reached that are well above those at which the product should properly operate. Therefore, you should use the amount of fuel specified in the technical tables.

6.2. CLEANING TO BE DEALT WITH BY SPECIALIZED TECHNICIAN

6.2.1. Cleaning flue pipe

Mechanical cleaning of the flue pipe is recommended at least once a year. Excessive deposits of un-burnt solid material can cause problems with the evacuation of smoke, and gives rise to a risk of chimney fires.

To access the appliance's flue pipe for cleaning, remove the smoke deflectors.



WARNING!

The frequency with which the product is cleaned should be determined based on the amount of use of the product, the quality of the fuel and the type of installation.

You should have your chimney flue cleaned and repaired at least once yearly (typical) by a fully qualified chimney sweep. Any required maintenance to product installation or flue should be carried out during flue cleaning.



DIMPLEX
MILLBROOK HOUSE
GRANGE DRIVE
HEDGE END
SOUTHAMPTON
SO30 2DF
UK
TEL: 0845 600 5111
FAX: 01489 773050
WEBSITE: www.dimplex.co.uk

DIMPCO
AIRPORT ROAD
CLOGHRAN
CO DUBLIN
IRELAND
TEL: 01 842 4833
FAX: 01 842 4839
WEBSITE: www.dimpco.ie

DIMPLEX [c] is a Division of GDC Group Ltd.
All rights reserved. Material contained in this publication may not be reproduced in whole or in part, without prior permission in writing of GDC Group Ltd.
